### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013300 Address: 333 Burma Road **Date Inspected:** 05-Apr-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang, Tu Jun No **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

West Tower Lift 4, AE Corner Seam @ 119M, 131M, 135M, 139M, 143M Double Diaphragm Area

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

WSTL4-2B/L-60B

This QA Inspector performed green tagging for the following components.

South Tower lift 5, AE corner seam (weld# SSD1-TL5-1B-F-3A/B, 36A/B) - Green Tag No. 11631 The upper Bearing plate on skin E of West Tower lift 1 exterior - Green Tag No. 11774

This Quality Assurance (QA) Inspector observed the following work in progress:

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

#### BAY11

#### TOWER STRUT FLANGE PLATE

SAW welding of weld joint 4B located on WD1-STSA4-5-139M-1.

Welder is identified as 040699. ZPMC CWI is identified as Mr. An Qing Xiang.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

SAW welding of weld joint 21B located on SD1-STSA4-5-139M-1.

Welder is identified as 044560. ZPMC CWI is identified as Mr. An Qing Xiang.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

## TOWER STRUT ANGLE CONNECTION PLATE

SAW welding of weld joint 1B located on ED1-SA4-69-119M-1.

Welder is identified as 041716. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

SMAW welding of weld joint 1A located on SD1-SA4-56-131M-1.

Welder is identified as 040614. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3211-Tc-U5b-1.

## WEST TOWER LIFT 4, AB CORNER SEAM REPAIR (T-WR3131)

SMAW welding of weld joint 59A/B(Repair) located on WSTL4-2B/L.

Welder is identified as 202323. ZPMC QC is identified as Mr. Zhao Mao Mao.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G(4F)-REPAIR.

#### BAY10

## NORTH TOWER LIFT 4, AE CORNER SEAM

SAW welding of weld joint 22A located on NSD1-TL5-3B-F.

Welder is identified as 0503060. ZPMC QC is identified as Mr. Deng Zhi Bing.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

## **FACADE PLATE**

FCAW welding of weld joint 12 located on ED1-SFSA3-117-1.

Welder is identified as 040268. ZPMC QC is identified as Mr. Jiang Xiao Bo.

The welding variables recorded by QC appeared to comply with WPS-B-P-2112.

#### NORTH TOWER LIFT 4, AE CORNER BACKFILL PLATE

FCAW welding of weld joint 30 located on NSTL4-3I/L.

Welder is identified as 053869. ZPMC CWI is identified as Mr. Du Zhi Qun.

The welding variables recorded by QC appeared to comply with WPS-B-T-4333-Tc-P4-F.

FCAW welding of weld joint 99 located on NSTL4-3I/L.

Welder is identified as 057180. ZPMC CWI is identified as Mr. Du Zhi Qun.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The welding variables recorded by QC appeared to comply with WPS-B-T-4332-Tc-P4-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer